FROM LAB TO MARK

News from the Technology Transfer Program

NSA shares cyber software via open source

In June, the National Security Agency uploaded the Security Integrity Management Platform (SIMP) software to its new open-source software (OSS) site on GitHub, one of the world's largest hosting services for sharing source code. This technology can provide a solid "defense-in-depth" strategy for enterprise security and will make it easier for other government organizations and private industry to adopt this tool to help fortify their networks against cyber threats.

SIMP enables the creation of secured Linux clusters that can maintain a specific security posture and ensure system integrity by consistently applying policy-oriented and best-practice configurations over time. SIMP incorporates the centralized management tool from Puppet Labs to address process degradation at the operating-system level and eases auditing, accreditation, and client upgrade processes. SIMP is a continually managed, minimal Linux distribution based on Red Hat 6.x and 7.x; it can also support the Community Enterprise Operating System (CentOS) Linux distribution.

NSA has increasingly shared its research with the open-source software community, a move that can accelerate the development of innovative capabilities and solutions in both the public and private sectors. For example, the NSA Technology Transfer Program (TTP) recently prepared the OSS release of the Agency's NiagaraFiles (Nifi) technology via the Apache Software Foundation. The global reviews and critiques that stem from open-source releases can broaden a technology's applications for the US private sector and for the good of the nation at large.

Why does NSA need its own GitHub site? Linda Burger, director of the NSA TTP, notes that "an agency site aggregates the niche, cutting-edge technology that NSA is offering to open source via GitHub, making it easy to find and access."

Burger also noted OSS releases are extremely efficient for transferring technology from the federal laboratory to the marketplace. "This approach enables the Agency to adapt to the tremendous speed of technology advancement in support of mission solutions, while also making applications available to the public at no charge."

Carl Caum, senior technical marketing manager at Puppet Labs, said his company is excited by NSA's contribution to the open source community.

"The goal of the SIMP framework is to help users automatically enforce compliance with various Security Content Automation Program (SCAP) profiles through the consistent configuration of core infrastructure components. NSA's contributions can help other organizations with similar challenges, so operations teams don't have to spend precious time trying to solve the same problem themselves. That's the power and beauty of open-source software."

To learn more about technology transfer activities at NSA, please contact the TTP at <u>tech_transfer@nsa.gov</u> or 1-866-680-4539. ■

